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ABSTRACT

The five major societal changes in the past twenty-five years which have had a major impact on education services are (1) our transition from a rural, agrarian society to an urban, technological society; (2) changes in occupational and employment structures; (3) education services have become a major enterprise; (4) expansion of Federal and State government roles in education; and (5) groups comprising the education community have become more specialized and organized around selected vested interests. Largely due to Federal programs, a new profession, education researcher and developer (R and D), has emerged. While the R and D profession has been expanding, many of the same societal forces have led to a renewal within the teaching profession. The primary implication of this renewal is that the education R and D community needs to develop a direct linkage system with classroom teachers and a collaborative relationship with teacher groups in articulating educational needs and lobbying for programs. Much of the discord between education R and D and teachers begins because they view each other's roles and responsibilities negatively. Education R and D can increase the communication and collaboration with teachers by involving them in institutional governance, program design, development and field testing of materials, and diffusion and adoption of educational products. (The author's answers to nine questions from the audience of vocational education R and D personnel are appended.) (EM)

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Occasional Paper No. 29

THE ORGANIZED TEACHING PROFESSION AND EDUCATION R AND D

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The Center for Vocational Education
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PREFACE

The Center for Vocational Education is indebted to Dr. Shirley D. McCune for her lecture entitled "The Organized Teaching Profession and Education R & D." Dr. McCune is director of the Title IX Equity Workshops Project, Council of Chief State School Officers, and presently is serving as director of the Resource Center on Sex Roles in Education, National Foundation for the Improvement of Education.

Dr. McCune's lecture reviews some of the major changes in our society and their significance for the education community, including education researchers and developers and education practitioners.

Born in Sterling, Colorado, Dr. McCune received a B.A. from Colorado State College of Education (1957), an M.S.W. from the University of Denver (1960), and a D.S.W. from the National Catholic University (1966). Dr. McCune began her professional career as a classroom teacher at Padroni Public Schools at Padroni, Colorado. She later served in such roles as director of education, South Dakota Farmers Union; university professor; and evaluation director for the National Council of Juvenile Court Judges Training Program (George Washington University).

Dr. McCune holds membership in a variety of professional organizations, has published several articles, and is the coauthor of a number of texts. She also has coordinated and participated in many workshops, and presented speeches to various organizations.

On behalf of The Center and The Ohio State University, I take pleasure in presenting Dr. McCune's lecture, "The Organized Teaching Profession and Education Research and Development."

Robert E. Taylor
Director
The Center for Vocational Education

THE ORGANIZED TEACHING PROFESSION

AND EDUCATION R AND D

Most of us are fully aware that rapid social change has been a characteristic of our society. Seldom, however, do we examine the nature of this change and its full impact on all members of the education community. During the past twenty-five years, changes in our society have led to the evolution of new structures, new roles, new functions, and new expectations for nearly every individual and group within this community. Although many of these changes have created new opportunities for improving the quality of education in our society, they have also created new problems and new sources of conflict.

The delineation of some of these changes as they relate to education researchers and developers and education practitioners will be the focus of this paper. The paper will review some of the major changes in our society and their significance for the education community; the evolution of the education research and development profession and the renewal of the teaching profession; the sources of conflict between these two groups; and some suggestions for dealing with these conflicts.

Changing Nature of Society

It is possible to delineate at least five major societal changes that have had a major impact on the organization and structure of education services. These societal changes provide the context for understanding the evolution of education services and the groups who provide those services. The major changes to be considered are:

1. Our transition from a rural, agrarian society to an urban, technological society.

   A primary change in the nature of our society has been the transition of our nation from a rural, agrarian society to an urban, industrial, technological society. In 1800, 60 percent of the labor force was involved in agriculture; in 1900 this figure was 48 percent; and in 1970, it had declined to only 5 percent.[1] The shift from a rural to urban society accelerated during the depression years of the 1930's, and increased sharply after World War II. Although we have seen some reversal of this trend and a movement away from the inner cities in recent years, our society remains an urbanized society.

   Many of the community institutions which contributed to the socialization and informal education of persons in rural America have been deemphasized or lost in this transition to urban life—the extended family, the church, etc. This loss created a significant vacuum for large numbers of the population. Some of the functions traditionally filled by these institutions of socialization and informal education in the rural community have been assumed by such products of technology as television. Others have been assigned to one of the remaining community institutions—the schools. This extension of the responsibilities of formal education programs has created an overload for many education agencies and institutions—an overload that has been insufficiently acknowledged or confronted.

2. The changes in our occupational and employment structures.

   The transition from rural to urban life has been accompanied by a corresponding movement toward specialization and complexity in the employment structures of our society. In 1800, 80 percent of the employment within the U.S. was in positions of unskilled labor; by 1900 the percentage had diminished to 60 percent; and by 1970, approximately 7 percent of the nation's paid work force were employed in unskilled labor jobs.[2] As the demand for skilled labor has increased, public education has been assigned the major institutional responsibility for preparing youth and adults for these jobs.

   The continuing fluctuations of the employment opportunities within our society maintain a continuing public demand for improved and extended job preparation programs. The education community is placed under substantial pressure to delineate the knowledge, skills, and behaviors needed for skilled, evolving employment opportunities and to demonstrate efficient methods for preparing youth and adults for these jobs.

3. Education services have become a major enterprise of our society.

   Formal education is a full-time activity of a sizeable proportion of our citizens, involving about 63 million persons as either students, teachers, or administrators—more than one person in four.[3] The growth of the enterprise of education has increased its importance to other sectors of the society and the power of its leaders.

4. As education has grown and become centralized in urban areas, the roles of federal and state governments in education have expanded.

   The traditional role and responsibility of the local community for the provision of education services has been supplemented by federal and state involvement in schools. The gradual transition of Americans into urban areas has been a primary impetus for the extension of state and federal involvement in local education as the needs for serving large numbers of diverse populations increasingly call for resources beyond the local community. At the present time nearly 30 percent of all elementary-secondary school students are attending school in the 187 largest school districts in the nation.[4]

5. As education has grown, the groups which comprise the education community have become more specialized and organized around selected vested interests.

   As education has become more complex, groups within the community have become more specialized and diversified. The need for organizing around vested interests and articulating these interests has been a necessity for survival of many of the multiple groups in the education community. Thus, we find educators organized around job functions (teachers, administrators, researchers, counselors, etc.), subject matter interests (historians, economists, psychologists, etc.), and educational ideologies and philosophies (humanistic educators, vocational educators, career educators, etc.). Because the resources with the education community have often been scarce, this organization has often led to fragmentation and competition within the community. Seldom do we find a unity among groups within the education community or an understanding or appreciation of the multiple interests, values, and behaviors among educators.

   Although these changes are the results of trends that have been going on for most of the 200 year history of our nation, they have accelerated during the past twenty-five years.

Education is now a big business that is governed in large measure through political forces. The impact of the growth and expansion of education services has led to the creation of multiple groups within the community seeking protection and influence. Only in a few instances can we find examples of ongoing collaboration among education groups who are focused on finding solutions to the problems which must be addressed if education is to meet the public's rising expectations for services.

The Emerging Education Research and Development Profession

The traditional emphasis of the education profession has been on the delivery of teaching services which could produce growth and increased knowledge in learners. Seldom have educators given emphasis to formal research efforts related to these services and much of the research used by the education profession has been produced by social scientists rather than educators. The traditional role of education schools or departments of education in institutions of higher education was the preparation of teaching practitioners rather than implementation of basic research efforts.

Earliest federal programs related to education followed this general pattern and gave little consideration to research efforts. The research that was carried out under federal support prior to 1954 consisted largely of the collection and analysis of statistical and demographic data which described the general parameters of education services and constituencies.

In 1954, the Congress enacted the Cooperative Research Act, which authorized the Commissioner of Education to "enter into contracts or jointly financed cooperative arrangements with universities and colleges and state education agencies for the conduct of research, surveys, and demonstrations in the field of education."[5] Concurrently, the National Science Foundation initiated programs for improving the content and effectiveness of education in the sciences.

Both of these efforts resulted in significant outcomes for the education community. As delineated by Clark and Guba,[6] these include:

- For the first time the Office of Education was placed in direct contact with the scholarly community in higher education which was concerned with research in education.
- For the first time, the Office of Education and the National Science Foundation became involved with the community of education practitioners.
- For the first time, the federal government was pressed to develop a direction and a program for education research efforts.

As federal policy evolved related to the goals of the Cooperative Research Program, it became clear that the primary mission of federal programs should be the improvement of educational practice and operations. The movement toward a federal educational research program as authorized by the Cooperative Research Program called attention to a vacuum in competencies necessary for the implementation of research related to the improvement of education operations. The majority of persons who possessed the skills for research activities belonged to a relatively small scholarly community which was often far removed from education operations and the experience and concerns of the education practitioner. Education practitioners, on the other hand, experienced the problems of education practice, but seldom possessed the necessary specialized skills to carry on education research.

Rather than confronting these issues, federal programs of education research copy the format and structure of other federal research programs. Between 1956 and 1962 federal programs of education research could be described in the following way.

> The primary institutional focus for program support was the institution of higher education; the structure was the open competitive application for funds by individual scholars, the product was the R and D report from the scholar to the agency.[7]

The results of this structuring of education R and D activities were disappointing. The fragmentation inherent in this approach and its distance from the day-to-day problems of schools created widespread dissatisfaction. In response to this dissatisfaction, a movement toward correction of this fragmentation was begun in the early 1960's. Corrective measures taken between 1962 and 1965 included the move toward federal support of development activities designed to meet specific needs and the creation of ERIC and R and D Centers where communities of scholars could be involved in such activities.

The 1965 Elementary and Secondary Education Act moved beyond these initial efforts to coordinate education R and D. ESEA provisions provided for the training of education personnel in the utilization of R and D products, for the eligibility of local education agencies for federal research demonstration funds, and for the establishment of a national network of regional education laboratories which could address the linking of education R and D with education practice and operations. By 1970, federal expenditures for education R and D activities were well in excess of $100 million and a new profession of education research and development began to emerge. Members of this emerging profession were unique in that they performed education R and D activities in settings which were either apart from or only tangentially related to the traditional scholarly community within higher education and that they were given direct responsibility for linkage with other groups within the education community.

Despite the progress attained in the development of this nationwide system for education R and D, problems remain. Much of the potential contribution envisioned for the education R and D community has not been actualized. Such problems as shifting federal priorities, the lack of stable funding, the difficulties of developing a corps of education researchers and developers with the necessary range of skills for effective knowledge production, and the lack of federal funding for diffusion and adoption of education R and D are some of the major barriers to the realization of this potential.

The 1972 Education Amendments were one effort to combat some of these problems; they established the National Institute of Education and further articulated the policy of federal support of education R and D. This policy emphasized the need to provide solutions to the problems of education and the promotion of the reform and renewal of education; to advance the practice of education; to strengthen the scientific and technological foundations of education; and to build an effective education R and D system. Despite this articulation of policy and reorganization of federal activities, the funds for education R and D have diminished, the gap between education R and D and education practitioners has been maintained, and much of the activity of the education R and D community has been spent in efforts to organize the political support necessary for its survival.

Despite the problems which continue to plague the education R and D profession and the many uncertainties regarding the future of education R and D, several significant steps have been accomplished. The achievement of these steps has, in turn, called attention to new problems which must be addressed for the continuing evolution of the profession.

- The beginning of a new profession, that of education researcher and developer, has emerged in the education community. With this emergence has come the need for further examination of the experiences which are necessary to prepare individuals for effective participation in the profession.

  Today's education researcher and developer is unique in that she/he is being asked to develop and demonstrate skills which in the past have rarely been possessed by one education professional. The education researcher and developer must have an understanding of the perspectives of education practitioners and a working knowledge of the structure and operation of education services. At the same time the education researcher and developer must be able to utilize the range of research methods and technologies for product development that are necessary for R and D activities. This combination of knowledge of education practice and research skills has little precedent in the education community.

  At the present time there is little available within the programs of institutions of higher education that would prepare education researchers and developers for the unique aspects of their role. On-the-job training possibilities are limited by the demands inherent in meeting the production levels required by federal agencies, and staff training activities are seldom given attention in federal programs for carrying out specified contracts.

  One of the needs that must be addressed in the future is the further delineation of the competencies needed by the education researcher and developer and the skills necessary for performing this role, and the development of professional preparation programs which can provide these competencies and skills.

- The successes of past education R and D efforts have demonstrated the importance of continuing education R and D programs. Weaknesses in past efforts have also demonstrated the continuing need to identify the optimal structures and variables that are necessary to increase the effectiveness of education R and D efforts.

  Despite the disappointments regarding the level of impact and the effectiveness of the total education R and D program, we have seen glimmers of the potential of a national network of education R and D. Many quality products have been developed. Although much of the significant work of the education R and D efforts has not reached the level of diffusion or adoption that would be desirable, this has been accomplished in a few instances. The feasibility of an effective research, development, diffusion, and adoption process has been documented.

  It is now our task to identify the variables that are critical to more effective movement through this cycle. Only when we truly understand the processes required for achieving this cycle, can we move forward to deal with the barriers to its effective implementation.

Emergence of a Renewed Teaching Profession

During the same period of time that the education R and D profession has been expanding, many of the same societal forces have led to a renewal within the teaching profession. Although the primary changes within the teaching profession have been felt in the ranks of elementary-secondary school teachers, some of these changes may be seen in a few areas within post-secondary education, particularly in the community colleges.

In the early 1950's we observed a rapid expansion of education services, an increased supply of students, and shortages of trained personnel. Demands for increased services and improved services were being articulated and teachers began to feel the public demands for reform of education. Despite the concern of many teachers, there was little that many of them could do. Teachers had little influence in the determination of education policies, in the conditions of their work, or in the determination of the renumeration of their services. For the most part, teachers were not in control of the organizations which spoke for them.

The development of a trend toward teacher unionization and a corresponding change within teacher organizations toward advocacy was an inevitable result of the frustration felt by teachers. Strong leadership emerged within teacher organizations and teachers began to assert themselves both within and through these organizations. Aspects of the trade union model were adopted as a method for achieving some of the goals of teachers.

The first efforts of teacher organizations were directed toward achieving increased pay and fringe benefits. The success of these efforts was reinforcing and teacher organizations have increasingly applied the collective bargaining techniques originally employed for the bread-and-butter issues to issues such as the size of the classroom, the curriculum used in the school, the selection of instructional materials, the content of in-service training programs, the adoption of affirmative action plans, the right to participate in decision-making regarding reductions of staff, etc. By 1972, teachers were increasingly actualizing their potential role within the education community at the bargaining table.

The operation of the largest of the teacher organizations, the National Education Association, provides insight into some of the changes within the profession and the direction of developments which may be anticipated in the future.

One of the major changes within the renewed profession has been the development of methods and techniques for meaningful participation and involvement by members in the decision making within the teacher organization. The structure and operation of the NEA have been organized to ensure a shared decision making among the many groups included in the membership. The primary policy for the organization is determined by a national representative assembly of more than 10,000 delegates who meet yearly. Although a program and budget for the organization are presented to this assembly by member committees, the body clearly acts as a decision making group and not as a rubber stamp regarding committee proposals.

Perhaps one of the most important devices which facilitates widespread member participation in the decision making of the NEA is the utilization of an adapted management by objectives system which is used for the determination of the program activities and the allocation of a $50 million national budget. The model has been adopted by a substantial number of the state affiliates so that a significant percentage of the 2 million members of the organization have been trained and have experience in the governance of an organization which is dealing with issues beyond the scope of classroom management.

As a result of this experience, classroom teachers view with increasing dissatisfaction their exclusion or token involvement in the determination of policies and programs which affect them within the education community. Policies and programs related to education R and D are no exception.

A related feature of the renewed teaching profession is its active involvement in the political world. Teachers realize the degree to which federal and state governments will influence many aspects of their day-to-day professional functioning. NEA has gradually increased its involvement in political campaigning and lobbying activities. In 1976 the NEA for the first time endorsed a

presidential candidate. The success and the experience gained from these efforts have moved the organization into a position of some political power since the organization represents one of the largest constituency groups among lobbying organizations.

Some persons within the teaching profession view the efforts of education R and D as competing with training and instructional programs for the scarce resources available for the expansion or improvement of education activities. If the education R and D community is to receive the political support of teacher organizations, teachers must be educated as to the significance of education R and D in the improvement of education and considered and included in the design of R and D programs.

Leaders within the NEA recognize that the organization is at a critical point in its development. In the past, most organizational efforts have focused on organizing teachers and developing a capability for influence and power. Now that the potential for organizing and serving the membership on the basis of bread-and-butter issues has largely been actualized, greater attention is being given to increasing professional services to members. Teachers look to federal programs for the solution of many of their problems. It is to be anticipated that the organized teaching profession will demand that a greater proportion of education R and D funds go to support the specific concerns of teachers.

The primary implications of this emergence of a renewed teaching profession for the education research and development community are:

- the need for the development of a direct linkage system with the classroom teacher.

  If education R and D is to be successful, greater effort must be given to understanding, involving, and working with the classroom teacher who will be the ultimate product consumer for the majority of products being developed. Classroom teachers have extended their interests and their perceptions of their capabilities beyond the narrow confines of the classroom. It is essential that teachers be involved in the governance and programs of education R and D if the ultimate goal of improving education services and operations is to be attained.

  Within this process of involvement it is important to note that relationships must be established directly with classroom teachers. Linkage systems based on the establishment of working relationships with administrators or persons who presume to speak for classroom teachers are no longer likely to be effective. Many of the failures of R and D efforts can be attributed to strategies which were based largely on linkage with schools rather than with teachers.

- the need to develop a collaborative relationship with teacher groups in the articulation of education needs and lobbying for federal and education programs.

  Teacher groups are increasingly viewing all education programs which may relate to their interests with a more critical eye. It is essential that some degree of communication and collaboration be established between education R and D and teachers if an effective program is to be maintained and improved. Widespread political support for education R and D is a necessity if the R and D community is to be maintained.

Sources of Discord Between Education R and D and Teacher Practitioners

Many of the sources of discord between education researchers and developers and teachers begin with the perception of each regarding the role and responsibility of the other. From the perspective of the education researcher and developer, teachers are often viewed as:

- occupying the lowest and least important role within the hierarchical structure of schools,
- incompetent to deliver products adequately (hence these products must be "teacher-proofed"),
- incapable of understanding and participating in the research and development process,
- posing barriers to the changes necessary for the reform and renewal of schools,
- unappreciative of the importance and value of education R and D and the difficulties faced by persons fulfilling that role.

Although these perceptions are seldom verbalized, they are frequently reflected both in the direction of federal R and D programs and the programs of the individual organizations carrying out education R and D. Reviews of the number of teacher practitioners who serve on the governance and advisory bodies of federal agencies and programs and educational laboratories and centers; of the degree to which teachers are involved in the planning of education R and D programs; of the assumptions implicit in the strategies used in education R and D efforts; and of the amount and nature of communication between the R and D community and teachers provide support regarding the existence of these perceptions.

Lest undue responsibility is implied for one group, it is important to delineate some of the negative perceptions held by teachers regarding education researchers and developers. Within the eyes of many teachers, education R and D is perceived to be:

- esoteric and unrelated to the reality of the classroom and the needs experienced by teachers,
- conducted within the language and framework of the specialized needs of the education research community rather than that of the teacher practitioner,
- wasteful of limited resources which are specifically designated for the improvement of education practice and operations,
- not reflective of the importance and value of the role of the classroom teacher and the difficulties faced by persons filling that role.

Each of these sets of perceptions is understandable when we consider the development of each of these professional groups and the many factors which work to maintain these perceptions.

Looking Toward Solutions

It is comparatively easy to examine some of the major difficulties that will be facing the total education community during the next few years—the decrease in the number of school age children, the "oversupply" of classroom teachers, the increasing demands made upon scarce resources, and the continuing public demand for more effective and efficient education services. Each of these factors creates a set of problems which must be faced by the total community. It is not possible for any segment of the community to ignore these difficulties with the hope that it will not affect its interests and future.

If any effective solutions to these problems are to be found, a greater sense of direction and unity from the various members of the education community will be required. It will be the education community's task to provide the leadership necessary for articulating the need for continuing education and adult education, reorganizing the curriculum to respond to the need for realistic job preparation and the use of education experience as a means of contributing to the quality of individual lives rather than simply the attainment of occupational privileges; developing the capability within all areas of the community to deliver quality, equitable services to the diverse populations that must be served; and demonstrating the need for adequate resources and accountability for the use of such resources. These goals are important for all segments of the education community. They will not be achieved without enlightened efforts to develop the necessary communication and programs for pursuing these goals.

The goals may sound idealistic but they are essential if we are to improve education services in any significant fashion. Education R and D can initiate steps which can increase their communication and collaboration with teachers. Steps can be taken in the following areas of education R and D:

Institutional Governance

One of the basic methods of ensuring that the interests and perspectives of classroom teachers are articulated in the decision making process of education R and D institutions is to ensure their representation on governance boards and advisory bodies. Mere appointment of such representatives may not be enough, however. It is critical that good faith efforts are made to ensure their meaningful participation in decision making. Organizational policy should reflect collaboration and an equitable consideration of the input of all members rather than structures of individual or group power and control.

Working with any governance body composed of a variety of persons from different roles and perspectives requires both effective staff work and group process skills. Members of such bodies should be oriented so that they will understand their roles and responsibilities; information must be provided them so that they can understand the context of the problems under consideration and the factors that are related to decision making; and meetings must be structured in ways that facilitate the full participation of all members. Only when considerable attention is given to these factors will governance and advisory boards be able to function at optimal levels of effectiveness.

Program Design

It is recognized that federal funding and program requirements may not always permit education R and D organizations to function as the sole determiners of the scope of their programs. It is essential, however, that the concerns of teachers be considered wherever they are of potential relevance to the program or project being implemented. Teachers are interested in research and are increasingly looking to education R and D to assist them in finding solutions to their problems. Surveys carried by the NEA suggest that some of the major priorities that teachers pose for the education R and D community revolve around questions such as:

- What are the best methods of instruction?
- How can I best individualize the instruction within the classroom?
- How can I improve my teaching effectiveness?

- What instructional materials are available?
- What assurance do I have that they are effective?
- Have materials been translated and formated for practical use in the classroom?
- Will I receive training and/or assistance in learning how to use the material?
- How much flexibility do I have in materials use and/or adaption?

These concerns of teachers provide a framework which is useful in considering the design of an entire R and D program or in evaluating particular projects or products. In reviewing these concerns, however, it is important to remember that many of these questions may be interpreted or understood differently by teachers than by education R and D personnel. Because teachers and researchers and developers may be accustomed to dealing at different levels of abstraction or theory, using different vocabularies, or operating at different levels of examination, it is important that these questions be discussed between the two groups. Substantial dialog between practitioners and R and D personnel will be needed if these differences are to be understood and reduced. Discussion and reevaluation must occur on both sides before these two groups of educators ask the same questions or arrive at the same answers.

One of the common conflicts between educational R and D and practitioners is that their program priorities are based on different interests and needs. If education R and D personnel are to involve teachers in their efforts, it is essential that some attention be given to teacher's perception of R and D needs. Likewise, it is important to remember that R and D personnel cannot speak on behalf of the issues of the teacher role or speak as teacher surrogates.

Program priorities should reflect some balance of the needs identified by teachers and those identified by education R and D personnel. Because teachers are, in many cases, the prime consumers of R and D products and knowledge, their needs must be taken into account in the design of these products.

Development and Field Testing of Materials

Many of the R and D products that are intended for classroom use are developed without exposure or reference to the organization and conditions of the classroom. The ultimate usability and relevance of such products would be maximized if developers would spend more time in classrooms simply talking to teachers and students about those concerns that are relevant to the development of the product. Involvement of practitioners during initial phases of development is also one important means of building much needed collaborative relationships between the R and D and practitioner communities.

Involvement of practitioners during the implementation of field testing is also important both as a means of improving product quality and building collaborative relationships. Many times practitioners have resented the intrusion of field testing efforts into the ongoing activities of the classroom. Such resentment could be reduced if the following steps were taken:

- Teachers are consulted in advance of field testing. Efforts should be made to explain the primary purposes of the development activities and how this field testing fits into the total project.

- Effort should be made to ensure that the field testing is structured in ways that will help the teacher understand the assumptions being made about the product, its ultimate uses, and other relevant information.

- Teachers and students involved in the field testing should be provided feedback as to the results of their participation in such tests.

Such steps reinforce a sense of basic respect and appreciation of the role of the educational practitioner and may contribute to the development of a more accurate and useful data base regarding any project or product.

Involvement of Teachers in Diffusion and Adoption

One point of common agreement between diverse groups in the education community regards the inadequacy of efforts related to diffusion and adoption of educational products. There are many reasons for this failure but two that are critical to teachers are:

- The content, format, and distribution of the product

  Any evaluation of the potential diffusion of a product or its suitability for adoption by teacher practitioners should consider such questions as:

  - Is the language within the frame of reference of the teacher and the organization of the curriculum?

  - Is the material easy to use?

  - Is the material readibly available?

  - Is the material priced at a level which is realistic for classroom teachers?

  - Can the materials be adapted to meet individual or situational needs?

- The diffusion communication networks used

  Educational R and D has often attempted to design new ways of reaching teachers without using the vehicles that are presently available. Examples of such existing vehicles include professional organizations (AFT, NEA, or AVA), most of which have a program of regular publication and teacher services; or practitioner-oriented publications or companies (*Teacher, Learning,* etc.).

These steps obviously do not address the issues related to the involvement of educational practitioners in the determination and implementation of federal R and D policy and programs, but many of the solutions would be similar—the involvement of practitioners in governance and advisory committees, in the design of programs, in the testing and modification of programs, and in the diffusion and adoption of programs. Each of these steps is necessary if a partnership of the interests within the education community is to be built for meeting the challenges of the future.

FOOTNOTES

[1]Ralph Tyler, *Perspectives on American Education*, Chicago: Science Research Associates, Inc., 1976, p. 23.

[2]Ibid.

[3]Mary A. Golladay, *The Conditions of Education*, Washington, D.C.: National Center for Education Statistics, Department of Health, Education, and Welfare, 1977.

[4]*ERS Bulletin* 4, April 1977, Arlington, Va.: Education Research Service.

[5]An Act to Authorize Cooperative Research in Education, Public Law 531, Chapter 576, 83rd Congress, July 26, 1954.

[6]Egan S. Guba and David L. Clark, *The Configurational Perspective: A View of Educational Knowledge Production and Utilization*, Washington, D.C.: Council for Educational Development and Research, Inc., 1974, p. 8.

[7]Ibid., p. 10.

QUESTIONS AND ANSWERS

1. What are your perceptions of the "linker" role which is developing in education?

   In many ways that's the role that I think is new in the sense of the R & D person. One of the difficulties is that we continue to look to the traditional educational research community for preparing people for that role. I think they're very important aspects of that community and very important learning from an experience in the education research community that are relevant, but they aren't complete enough and they are so far removed from many of the application and development issues. The kind of linkage personnel that I would like to see develop would have experience not only in research but in managements and systems kinds of things so they understand organization, training, and instructional technology. What I'm talking about is a very new disciplinary area or body of knowledge that this group needs to have. I would have to say that much of the current research and development is not critical, and I would rather see federal contracts give much more time to consultation technical assistance so that those products that are developed go through the cycle. Usually, the educational R & D person develops the product and they're all stored very nicely or if you want to read the CEDaR catalog you can find the thousands that are listed there. We have to understand that the R & D communities need money to produce the research and technical assistance to use it.

2. What are some of the issues for which teachers are going to lobby in the future?

   I think our teachers will move into R & D. Some of the positive things I hope to see in the future will be teachers spending time in the classroom, time in curriculum development or adaptation kinds of things, and time in training that they can do many jobs. But we have to be very careful because when teachers move into that role they may change perspective just as management studies demonstrate that when ranking file union people move into the role of supervisor, they change their perspective. Often times we forget the situation in the classroom. Even though I think that's a viable method, I think we can't give up the need for very close communication in continuing to keep ourselves honest.

3. Are educational organizations now ready to pursue such areas as increasing the viability of educational R & D?

   One of the goals of the NEA is the federal collective bargaining bill but that's a relatively small part. NEA, for example, has just hired a staff to do nothing but monitor and watchdog the federal agencies. One of the areas under scrutiny is the NIE budget and the series of proposals to the educational practitioner community that look like a huge federal windfall. However, they do not have control right now, so I guess that labs and centers and people who are the primary beneficiaries should be on notice to get together on that issue or they will be fighting NEA and Congress. There was nearly a confrontation between NEA and the labs and centers over the last appropriation and it was averted by several people's skillful manuvering. Congress frankly is sick and tired of having the educational community represented by 150 voices, so

they want to pull the money out of R & D so that they can control it. They also want to set up their own R & D if they can't get anyone else to be sympathetic. I think they're going to be more concerned about teacher centers and place more emphasis on training and technical assistance. One of my interests is organizational theory and change and if I were to look at organization throughout the United States, I'd have to say that NEA is one of the most remarkable examples of organizational change. There's been dramatic change in that organization, namely that classroom teachers are in control. Let me just give you an example. the structure of NEA is such that there is not one person who can speak for the NEA, not the executive director nor the president. There is a shared power and a great emphasis on the fact that we run this organization. Staff and teacher leaders are very clearly segregated along those lines. The staff person is there as an expert in a certain area or as a hired hand to do things, but not as a control person. When I talk about bread-and-butter issues I mean that the days of making large scale pay increases at the bargaining table are over, not only for the teaching profession. NEA has two million members and obviously their concerns are no longer can they be organized but how do we serve them? We're no longer teaching them collective bargaining but providing help in instructional and professional development areas. I think that's very reaffirming in one sense and it also explains the ideological difference between AFT and NEA which is that AFT has adopted the trade union model totally. There is a big difference yet in terms of AFT wanting to move to development issues which they have not seen as a priority. NEA and some of the other white collar unions are trying to combine the elements of the trade union model with the professional association model to focus on instructional and professional issues.

4. Where do we begin as a national center in terms of insuring R & D is reality based?

The first thing is an internal examination, determining what your records show in terms of involvement in the governance of program design. I think that's a very strong place to begin. The second thing is to try to influence the rest of the educational R & D community that this is a reality. Therefore, you have your own politicking to do within your ranks as well as in other ranks. The third thing is that someone has to take the initiative and say this is what the federal dollar is going to be and we're going to have to decide how it's going to be used. We must have some agreement as to how we should divide it up before we go before Congress. It has to be that kind of confrontation session among groups before we're going to find some reality. We have to have a national system for R & D and also money for field demonstration and for much more flexible creative projects. One of the ways the educational R & D community would provide some credibility to the teaching profession is to point out where those areas are. They're not saying they can do it alone and certainly the educational R & D community can't do it alone.

5. What is the potential role of teacher centers in terms of training teachers to use R & D as well as giving direction to future R & D?

One issue should be training as a part of R & D. R & D is the beginning of a process that starts in terms of development and ends in the classroom. You have to accomplish many activities before you get R & D to the classroom. There is no question that people who are out of the classroom also have insight as to what should be done so there has to be a balance between both the expert and the classroom teacher. NEA has supported for a long time the utilization of teachers as a method of helping to define the directions for R & D as well as training. I think we have to set up special institutions where that interaction and interfacing can take place and the teaching center is one of the most viable.

6. What can be done to change teacher education programs to make them more relevant?

The crisis in teacher education to date is the incompetency crisis or the competency crisis, whichever way you want to phrase it. When I go to a classroom and see terrible teaching, and go to an educational R & D center and see terrible educational R & D, then I begin to understand and that's why in this paper I tried to put that in the context of people having been trained. We have not really helped people with skills basically because the schools of education are among the most persistent to any change. I will use the women's issue as an example. Even though we have over 8,000 women courses of study in the United States we can only document 100 of them having ever been given in schools of education. That's really a travesty but how do you begin to change that. Teachers are going to be advocating change in the system because they recognize that they haven't been taught instructional skills, or management skills, or all of the skill they really feel that they need at this time. One of the things that we're all doing is trying to figure out how do you get those skills. I think that that's one of the big R & D problems; how do you set up an affective program for preparing teacher practitioners.

7. What do professional associations do to increase good public relations for education?

I think relatively little. There have been some traditional things promoted like National Education Week, and a few areas like early childhood education which has done some very positive things with parents. So there are some good things going on in terms of public images and involvement in the community but by and large I think that that's a largely untapped area.

8. What is your opinion of competency based education?

Competency based education is a dirty word among many teachers for a very good reason and the Michigan situation was a primary example. A teacher who taught in a Detroit inner city school was set up with the same competency expectation and the same performance accountability expectations as the teacher who was in a very affluent suburb, and that's not a fair system. In teachers' minds the competency based program was another way to say you're incompetent and they've already heard that ten million times. However, the methodology of competency based education is obviously the way to go. The inadequacy of competency based education formulation thus far is that they've done a very good job beginning to identify some of the behaviors in terms of putting them together conceptually but they have failed in large measure so that many of the systems are still incomplete and not as well outlined and developed. I think you have to separate the political meaning of competency based education and what it's come to mean, and its use as a technology. The technology will remain and hopefully the kinds of punitive accountability measures that we're taking will be killed.

9. Where will teacher centers draw the expertise needed to improve?

Private groups have been springing up in teacher education and in-service training today. Institutions of higher education hold a fairly small percentage of the people who are actually doing in-service training. One of the things NEA would like to do is set up its own training cadre. Not that they wouldn't take people from institutions of higher education but what they are saying is that we want you to do the job that we want done, not the job that you tell us we should have done. NEA wants to have an input into teacher education. I don't think that they feel that they should have the total control but they certainly feel that it's not being controlled very well now.